

W5YI

National Volunteer Examiner Coordinator

REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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★ In This Issue ★

Congress supports Ham Radio...
President signs bill into law!
Unlicensed Amateur Radio Operation
6-Meter Repeater Subband NPRM
26-28 MHz "Freeband" Operation
September VE Program Statistics
Sept. Ham Radio Licensing Stats
Annual Health of the Hobby
Amateur Radio Call Signs to 11/1
AMSAT 198 Space Symposium
Pentagon Says FCC Erred on 220
School Science Stations Proposed
GMRS Reoriented to Personal Use
...and much much more!

Vol. 10, Issue # 22

\$1.50

PUBLISHED TWICE A MONTH

November 15, 1988

CONGRESS WRITES HAM APPRECIATION INTO BILL

There seems to be quite a bit of confusion as to just what Congress did when it approved support for the Amateur Radio Service. This support became part of *Senate Bill 1048*, the Federal Communications Commission Authorization Act of 1988 - the legislation that authorizes the FCC budget for 1988 (\$107 Million) and 1989 (\$109 Million.)

The initial support from Congress came in the form of Senate Resolution No. 127 introduced by Senator Pete Wilson and House Resolution No. 317 by Representative Bob Dornan - both of California. These resolutions supported the Amateur Radio Service in its emergency communications efforts. Resolution 127 ended up with 52 co-sponsors, Resolution 317 with 107.

Congress also noted that much emergency and disaster communications took place on the 220-225 MHz band. This was in June before the August 4th reallocation of 220-222 MHz to narrow band land mobile business use. The point of the Resolutions was to send a message to the Commission not to take hasty action which might inhibit the amateur's ability to assist during emergencies.

On October 7, the Senate agreed that an addition to the FCC appropriations bill supporting the Amateur Radio Service should be added. Section 10 of Amendment No. 3629, reads as follows: (Quote)

(a.) The Congress finds that;

(1.) more than four hundred and thirty five thousand four hundred radio amateurs in the United

States are licensed by the Federal Communications Commission upon examination in radio regulations, technical principles, and the international Morse code;

(2.) by international treaty and the Federal Communications Commission regulation, the amateur is authorized to operate his or her station in a radio service of intercommunications and technical investigations solely with a personal aim and without pecuniary interest;

(3.) among the basic purposes for the Amateur Radio Service is the provision of voluntary, noncommercial radio service, particularly emergency communications; and

(4.) volunteer amateur radio emergency communications services have consistently and reliably been provided before, during, and after floods, tornadoes, forest fires, earthquakes, blizzards, train wrecks, chemical spills, and other disasters.

(b.) It is the sense of the Congress that:

(1.) it strongly encourages and supports the Amateur Radio Service and its emergency communications; and

(2.) Government agencies shall take into account the valuable contributions made by amateur radio operators when considering actions affecting the Amateur Radio Service. (End Quote.)

Section No. 10, which has the force of law once signed by the president, "simply expresses strong support of the Amateur Radio Service and its emergency communications efforts. In addition,

[continued on page 3...]

W5YI REPORT

National Volunteer Examiner Coordinator

Page #2

November 15, 1988

UNLICENSED AMATEUR RADIO OPERATION

Gary Ray Roach of Porter, Texas, was recently convicted on one felony count of transmitting obscene, indecent and profane language. Judge Kenneth Hoyt of Houston, Texas, sentenced Roach to a fine of \$1,000 and three years supervised probation.

In addition, Roach was restricted from purchasing or using a radio capable of operating on a frequency for which he does not have a license. Roach must obtain prior approval from the court before applying for any FCC-issued license.

Conviction of a felony results in the loss of, among other things, the right to vote. Transmitting obscene, indecent or profane language by radio violates §Section 1464, Title 18, United States Code, and subjects the violator to a maximum fine of \$250,000 and two years imprisonment.

Although Roach does not hold an Amateur Radio Service license, his unlawful transmissions took place in the two-meter portion of the amateur band. §Section 301 of the Communications Act of 1934, as amended, prohibits the unlicensed operation of a radio transmitter. Violators can receive a maximum fine of \$100,000 and one year imprisonment.

The investigation was conducted and coordinated by the FCC Houston Office, in cooperation with the U.S. Attorney's Office. The criminal prosecution was directed by Assistant U.S. Attorney Richard Banks. [FCC Press Release dtd: 10/25/88]

FRAUDULENT NOVICE APPLICATION

Timothy W. Kuhn, of Los Angeles, California, has been assessed a \$300 fine for "willful violation of §Section 97.129" for submitting a falsified Amateur Radio Service application to the FCC in Gettysburg, PA, to obtain the Novice Class operator license without examination. The application indicated that **Fred O. Maia/W5YI** and **Gordon V. West/WB6NOA**, acting as Volunteer Examiners, administered the Novice requirements to Kuhn when in reality they did not.

The two VE signatures on the Form 610 matched signatures contained in the *Novice Voice Class* license preparation manual authored by Maia and West and distributed in Radio Shack stores.

The signatures in the Novice manual appeared on a sample application form to instruct applicants and volunteer examiners on the correct completion of a Form 610 application. Kuhn apparently traced these signatures which were not the actual signatures of Maia or West. An FCC employee recognized the signature as not being that of Maia.

Kuhn's Novice application has been dismissed as defective and he has been ordered to respond to the *Notice of Apparent Liability to Monetary Forfeiture* by November 28. The FCC reports that there are other instances of fraudulent Novice applications being filed with the Commission.

[Action by FCC, Special Services Division, 10/25/88.]

6-METER REPEATER SUBBAND NPRM

The Commission has proposed amending its Amateur Radio Service Rules to expand the 6-meter subband by 1 MHz.

Currently, one-half of the 4 MHz comprising the 6 meter band, 50-54 MHz, is authorized for repeater operations. However, because of the growing number of repeater stations in the 6 meter band, a larger repeater subband has been suggested. The repeater subband at present extends from 52 to 54 MHz.

The Commission stated that expansion of the 6 meter subband could provide for additional flexibility in the use of the 6 meter band. With this added flexibility, the amateur community could then determine for itself exactly how the additional 1 MHz could be used for additional repeater operation and in less populated areas where additional repeater operations are not an immediate need, the spectrum could be used for other types of operation.

Although there appears to be a strong demand in the amateur community for the expansion of the 6 meter subband, the Commission expressed concern about the effect such an expansion would have on other users of the 51.0-52.0 MHz segment. Therefore, comments are invited on whether expansion of the 6 meter repeater subband is needed and its impact on existing users.

[Action by the Commission, October 31, 1988, by *Notice of Proposed Rulemaking* - FCC 88-354]

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?
I am a currently licensed Extra Class amateur radio operator and
I wish to be a volunteer examiner. I do not own a significant
operator license revoked or suspended.

W5YI REPORT

National Volunteer Examiner Coordinator

Page #3

November 15, 1988

[Congress, continued from page 1]

it symbolizes Congress' belief that Government agencies, such as the FCC, should carefully consider the valuable, selfless efforts of amateur radio operators when making decisions that would affect the Amateur Radio Service." The Senate offered the amendment "not only as a tribute to amateur radio operators everywhere, but also to our distinguished former colleague, **Barry Goldwater. (K7UGA).**"

On October 20, the House of Representatives adopted Resolution 317 into H.R.2961, the FCC reappropriations measure. Representative Markey from Massachusetts stated "The communications skills of amateur radio operators have been extremely valuable to this Nation in many emergency situations. They have consistently volunteered to help with emergency communications. ...This amendment recognizes Congress' appreciation for the help of the amateur radio operators, however, **...it does not intend to influence the frequency allocation process.**"

Representative Rinaldo (New Jersey) urged the House to adopt the amendment noting "Amateur radio operations are much more than hobbyists - they are frequently the first line of help in natural disasters. Without their services ...many lives would be lost and much more property would be damaged beyond repair. As the radio spectrum becomes more crowded, there may be increasing pressure to convert amateur frequencies to other uses. That is why recognizing the importance of amateurs in this way is so important. I note that this provision is general in nature. It is not directed to any particular proceeding before any Federal or State agency, and **is not intended to affect existing standards or policies of any agency.** It is intended to recognize the services of our true radio pioneers - amateur radio operators.

The bill was signed into law by President Reagan last week. The amendment is important to amateur radio - but does not in any way change the reallocation of 220-222 MHz to the land mobile service - nor was it intended to.

When asked about the FCC's reaction to the "Sense of the Congress" statement in the FCC Authorization Act of 1988, **Maureen Peratino**, Deputy Director, FCC Office of Public Affairs made the following statement: "The FCC supports this language [in the Act] and continues to support amateur

operators as it has in the past." It doesn't appear that the FCC will be doing anything different ...nor will the law have any effect of any amateur frequency reallocation. While it is good to have the *Sense of the Congress* strongly on our side *on the record*, it doesn't bring 220-222 MHz back, ...nor does it direct the FCC to avoid reducing amateur allocations, as previous wording sought by the ARRL would have done.

26-28 MHz "FREEBAND" OPERATION

There has been a considerable amount of discussion in amateur circles lately about the illegal "freeband" operation between 26 and 28 MHz. It appears the primary equipment being used for this illegal operation is the Uniden 10-meter "President" amateur transceiver that is peddled nationally by CB shops and truck stops. On-the-air use can frequently be traced to the HR2510 since there is a characteristic beep at the end of the transmission that can be enabled by a button.

It is very easily modified to operate below the 10-meter ham band by simply cutting one trace and adding one resistor. Intercepted messages posted on amateur computer bulletin boards, *UseNet* (a ham radio computer conferencing network) and *CompuServe's HamNet* (an excellent source of information) tell just how extensive the "freeband" situation really is.

One Columbus, Ohio, amateur (whose father is a trucker working on his ham license) told us that truck stops arrange for CB shops to modify the rig for \$25 to "freeband" operation. A clerk told him that the manual's reference to "For Amateur Use Only" simply means that you can't use the transceiver to be a professional broadcaster.

The FCC recently busted a freebander (**Stevan F. Vandecar/Glendale, AZ**) and fined him \$1,000 for transmitting on 27.390 MHz - a frequency reserved for federal agencies. The FCC's Douglas, AZ, office used DF to locate Vandecar at home.

There is great concern now that Radio Shack has entered the 10-meter amateur radio business, that "freeband" operation might explode into a still greater problem.

We have seen and heard references that "*Monitoring Times*", a short-wave-listener magazine published by **Bob Grove/WA4PYQ** of Brasstown,

W5YI REPORT

National Volunteer Examiner Coordinator

Page #4

November 15, 1988

N.C. published explicit instructions on how the HR2510 could be modified to *freeband* operation in their October issue. Reportedly the *Monitoring Times* article is being packaged with the HR2510 by some CB dealers. This shocked us! We have known Bob for years and find him to be a totally reputable person and a devoted amateur. We phoned him to get his side of the story.

Bob said, " ...every Japanese general coverage transceiver can be opened up to full frequency operation. This same type of Japanese manufacturing mentality seems to have extended into the new HR2510 ten meter transceiver which by all appearances may be actually a thinly disguised CB radio with 10-meter capability ...imported with the option of easily increasing frequency coverage in the United States. Several experimenters have noted that the microprocessor can, with an extremely simple modification, be opened up to include full 26-30 MHz coverage. We indicated this in our [amateur] column which was a in-depth review of the transceiver as a piece of amateur radio equipment. We also pointed out how simple it is to be used for 26-30 MHz coverage but recommended that it be modified *for receive only* ...that it would be clearly unlawful to operate the HR2510 at its 25 watts output in the CB bands. We asked Bob if the modification he mentions in his October 1988 issue not only permits receive ...but also transmit capability as well without further modification. He said that was correct.

I asked Bob if he was aware that it was reported that his article was being packaged with the Uniden HR2510. "No, I was not aware of that!" Since *Monitoring Times* and its contents are totally copyrighted ...and we have not been approached by anyone for permission to reprint the article, this is clearly a copyright infringement. This phone call is the first that I have heard from anyone regarding a negative response to the (HR2510) review."

"The FCC can point out over the years, *Monitoring Times* and I personally, have been quite active in trying to control and reduce illegal operation. Not only does *Monitoring Times* not cater to CBers ...we have no column for Citizens Band radio at all. Grove Enterprises, our merchandising umbrella, does not sell CB equipment or accessories and there is absolutely no motive for us to propagate information on illegal operation."

We have received much information on

"freeband" operation. **Kenneth G. Kopp** (with the interesting ham call of **KOPP**, Anaconda, Montana) sent us the Uniden catalog. Page 24 shows the HR2510 featured on a page headlined "CB Radios" with the HR2510 touted as a "Full feature 10 Meter Mobile Transceiver. *Features full band coverage including the 10 meter Amateur band* from 28.000 to 29.6999 MHz." It appears that other than 10-meter operation was specifically intended in writing!

Some of the information regarding the HR2510 was supplied by **Don Stoner/W6TNS** of Mercer Island, WA, who copied it from the various BBS, etc. Don and I have been looking into the possibility of supporting a no-code ham class similar to that of Canada.

We were concerned the FCC might opt for the same route that they took on 10-meter amplifiers - that is to simply outlaw the equipment since they were powerless to control them. We also felt that the existence of widespread - so-called "freeband" - illegal operation would be contrary to any effort for the adoption of an entry level ham class similar to that planned for Canada. [A no code entry level class at VHF and higher frequencies with a license and examination required.] A major amateur opposition to a no code ham class is based on a fear of outlaw CBers invading the ham bands.

Uniden has relocated their U.S. headquarters to Texas. Don Stoner drafted a letter to Uniden and I hand carried it their Fort Worth offices. I met (on November 8th) with Paul Davis, their Executive Vice President. I found him to be very cordial and he agreed to an immediate meeting - even though I had no appointment.

Davis admitted that there were some problems in the distribution of the HR2510, but called the publicity "unfair". He admitted that the radio was designed and manufactured by Uniden-Japan to be easily modifiable to adjacent frequencies *in the European market* and was then redesigned by Uniden-Japan for sales in the United States. When asked about the radio being promoted in their catalog as "a CB radio with *full band coverage and ten meter operation*", Davis said the catalog was in error and was in the process of being corrected. I got the impression that Uniden was indeed concerned about the bad publicity and would be doing something about it. Davis also said that Uniden-Japan was producing the Radio Shack 10-meter radio.

[Continued on page 7, Uniden]

AMECO LICENSE PREPARATION MANUALS - Contain all Amateur
Radio Min h qz bns jltipl joic jorr jansi jder
NOVICE AMATEUR RADIO COURSE - Complete with 2 cassette Morse
c boui ind i latei liboc j a b j. E jhing j ne
to know to become a Novice amateur radio operator - or to teach an

W5YI REPORT

National Volunteer Examiner Coordinator

Page #5

November 15, 1988

SEPTEMBER VE PROGRAM STATISTICS

<u>September</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
<u>No. VEC's</u>	<u>*75</u>	<u>*59</u>	<u>*62</u>

<u>Testing Sessions</u>	<u>277</u>	<u>306</u>	<u>364</u>
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<u>VEC</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
ARRL	46.6%	43.8%	38.2%
W5YI	24.2	31.4	33.5
CAVEC	7.2	3.9	6.9
DeVry	4.3	6.2	5.5
Others	17.7	9.7	15.9

<u>Year-to-Date Sess:</u>	<u>2760</u>	<u>3228</u>	<u>3589</u>
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<u>Elements Administ.</u>	<u>4448</u>	<u>5538</u>	<u>6289</u>
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<u>VEC</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
ARRL	48.7%	52.8%	45.2%
W5YI	21.3	23.1	22.8
CAVEC	4.0	5.3	8.4
DeVry	3.3	2.7	3.9
Others	22.7	16.1	19.7

<u>Year-to-Date Elem.</u>	<u>48011</u>	<u>61274</u>	<u>69181</u>
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<u>Applicants Tested</u>	<u>3058</u>	<u>3342</u>	<u>3782</u>
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<u>VEC</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
ARRL	50.8%	50.5%	45.5%
W5YI	19.3	23.3	22.5
CAVEC	3.9	4.8	7.5
DeVry	2.9	2.9	3.9
Others	23.1	18.5	20.6

<u>Year-to-Date Tested</u>	<u>32973</u>	<u>38227</u>	<u>41335</u>
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<u>September</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Pass Rate - All	59.1%	62.3%	59.2%
Pass Rate - W5YI	56.0%	58.8%	55.9%
Applicants/Session	11.0	10.9	10.4
Appl./Session W5YI	6.7	8.5	7.5
Elements/Applicant	149	1.65	1.66
Sessions Per VEC	3.7	5.2	5.9

Administrative Errors by VE's/VEC's

<u>September</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Defect. Applications	0.1%	0.5%	0.5%
Late Filed Sessions	0.7%	1.6%	1.7%
Defective Reports	1.1%	4.3%	1.7%

*Note:

The FCC Considers ARRL, W5YI and DeVry to be 13 VEC's each since VEC's are appointed on a regional basis. The 13 regions are: Call Sign districts 1 through 0 plus Alaska (11), Caribbean (12) and Pacific Insular areas (13).

Source: Pers.Rad.Branch/FCC; Washington, D.C.

SEPTEMBER AMATEUR LICENSING STATS

<u>September</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
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New

Amateurs	908	1619	1917	1059
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Upgrading:

Novices	609	1080	1665	1075
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Technicians	251	356	479	396
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Generals	232	374	467	343
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Advanced	155	313	331	244
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<u>Total:</u>	<u>1247</u>	<u>2123</u>	<u>2942</u>	<u>2058</u>
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Renewals:

Total Renew:	N/A	N/A	3568	2437
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Novices	N/A	N/A	207	209
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Purged:(*)

Total Drop:	2113	1548	1460	974
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Novices	N/A	N/A	896	497
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Census:

<u>Indiv. Oper.</u>	<u>411580</u>	<u>421077</u>	<u>429678</u>	<u>436705</u>
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Change/Year		+9497	+8601	+7027
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Indiv. Operators by Class:

<u>Extra</u>	<u>Advan.</u>	<u>General</u>	<u>Tech.</u>	<u>Novice</u>	<u>Total:</u>
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September 1985:

37968	97825	117340	83117	76337	412587
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9.2%	23.7%	28.5%	20.1%	18.5%	100%
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September 1986:

40768	98195	116864	86148	79107	421082
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9.7%	23.3%	27.8%	20.4%	18.8%	100%
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September 1987:

43214	98147	114428	91633	82779	430201
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10.1%	22.8%	26.6%	21.3%	19.2%	100.0%
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September 1988:

46152	98354	112989	99603	79730	436828
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10.5%	22.5%	25.9%	22.8%	18.3%	100.0%
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Club/

RACES &	(1985)	(1986)	(1987)	(1988)
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Military	2781	2663	2430	2301
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<u>Total Active</u>	<u>415368</u>	<u>423745</u>	<u>432631</u>	<u>439129</u>
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% Increase		+2.0%	+2.1%	+1.5%
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(*="Purged" licensees are "drop out" amateurs who have failed to renew their licenses and whose 2 year grace period has expired. This will be the final year [until 1994] that we will have dropout numbers because of the changeover from 5 year to 10 year term licenses.

Amateurs apparently want to operate on 2-meters and hold the top-of-the-line Extra Class ticket. At least that is the conclusion you might come to from analyzing the annual growth figures through September 1988. Novices continue to drop out of amateur radio in record numbers.

Technician	+ 8.70%
Amateur Extra	+ 6.80%
Advanced	+ 0.21%
General	- 1.26%
Novice	- 3.68%

W5YI REPORT

National Volunteer Examiner Coordinator

Page #6

November 15, 1988

HEALTH OF THE HOBBY 1985-1988

The 1988 fiscal year is over. The government operates on an October 1 to September 30 FY. The following are our annual highlights from the year end statistics. [Source: FCC Licensing, Gettysburg, PA.]

New Amateurs (First License)

Month	FY 1985	1986	1987	1988
October	992	1413	874	882
November	1310	1074	1404	1131
December	1597	2579	1826	2582
January	1380	1501	2248	1189
February	1278	1889	1889	1624
March	2051	1676	795	2733
April	2100	2826	2950	2195
May	2200	1017	6797	3002
June	1218	2067	1850	1494
July	1478	2899	870	1842
August	1335	1406	918	1347
September	908	1619	1917	1059
Total:	17848	21956	24338	21080
Increase:		+4108	+2382	-3258
% Increase		+23.0%	+10.9%	-13.4%

Observations: "Novice enhancement" apparently has not helped increase the Amateur Radio ranks. The big influx of Novices during April/May 1987 was due to applicants taking Novice license examinations before the new "two VE/30 question" Novice examination went into effect. Less new amateurs joined the hobby last year than in either of the past two years.

HAM CENSUS - MOST POPULATED STATES

State	FY-1985 Rank/Total	FY-1986 Rank/Total	FY-1987 Rank/Total	FY-1988 Rank/Total
CA	1 56,960	1 58,400	1 59,944	1 61,432
FL	3 24,518	3 25,476	2 26,242	2 27,094
TX	4 24,408	4 24,930	4 25,495	3 25,992
NY	2 25,833	2 26,030	3 26,001	4 25,505
OH	5 20,276	5 20,370	5 20,783	5 21,010
IL	6 17,384	6 17,446	6 17,548	6 17,509
PA	7 17,153	7 17,309	7 17,525	7 17,531
MI	8 14,212	8 14,158	8 14,259	8 14,258
WA	10 12,600	9 12,997	9 13,436	9 14,016
NJ	9 12,824	10 12,910	10 12,932	10 12,823

Observations: Texas is now the third most ham populated state. New York continues to lose ground (as does New Jersey) and has now slipped to fourth. Three other states have more than 10,000 amateurs, they are: Mass. 11,256, Virginia 10,214 and Indiana with 10,098. Puerto Rico, which had been having staggering growth, only gained 4.3% last year.

HAM CENSUS - LEAST POPULATED STATES

State	FY-1985 Rank/Total	FY-1986 Rank/Total	FY-1987 Rank/Total	FY-1988 Rank/Total
WY	1 938	1 957	1 971	1 973
DE	2 991	2 1,005	2 1,014	2 1,020
SD	5 1,088	4 1,079	4 1,111	3 1,114
ND	3 1,026	3 1,039	3 1,104	4 1,116
VT	4 1,027	5 1,084	5 1,138	5 1,165
MT	7 1,577	6 1,602	6 1,581	6 1,593
RI	6 1,575	7 1,617	7 1,688	7 1,728
AK			8 1,971	8 1,955
ID	9 1,934	8* 1,930	9 2,000	9 2,052
NV	10 1,942	10 1,981	10 2,078	10 2,143
HI	8 1,907	8* 1,930	11 2,168	11 2,257

Observations: These are the states that are the hardest to get to Work-All-States.

HAM CENSUS - BY CALL SIGN FORMAT

Grp.	FY-1985 No. /%	FY-1986 No. /%	FY-1987 No. /%	FY-1988 No. /%
A	24563 5.9	26045 6.2	27026 6.3	28558 6.6
B	19784 4.8	21144 5.0	22709 5.3	24072 5.5
C	139040 33.7	141674 33.6	144627 33.6	149904 34.3
D	228588 55.4	231649 55.0	235312 54.7	233755 53.5
(*)	612 .2	570 .2	527 .1	539 .1
	412,587	421,082	430,201	436,828

Observations: Nearly half of all amateurs changing license class are opting to change their call sign when they upgrade so their call sign will match their license class. Most longer term amateurs do not change their call signs, however, while most newer licensees do exercise the option. Amateurs upgrading to the General Class are not eligible to change their call sign if they already hold a 1X3 call sign. [Group "A" format=1X2, 2X1 & certain 2X2, "B"=2X2, "C"=3X1, "D"=2X3.]

UPGRADING HAMS CHANGING CALL SIGNS

Year	Upgraded/%	Changed Call	Percent
1985	20,298	8,656	42.6%
1986	22,228 + 9.5%	9,907	44.4%
1987	23,814 + 7.1%	10,589	46.4%
1988	26,342 +10.6%	11,769	44.7%

The FCC has sent a second draft of a **Fact Sheet** to all VEC's entitled "**How to Administer an Examination for a Novice Class Operator License**" for their final comments. The purpose of the document is to provide Novice applicants and volunteer examiners with the correct procedure for conducting Novice examinations. The FCC's **John B. Johnston/W3BE**, Chief of the Personal Radio Branch advises that this should be the last draft before distribution to the public. Apparently Element 1A 5-WPM code tests containing every alphabet

W5YI REPORT

National Volunteer Examiner Coordinator

Page #7

November 15, 1988

letter, numeral and required punctuation and pro-signs will no longer be required. This is in keeping with the wishes of the Volunteer Examiner Coordinators assembled at the 1987 VEC Conference who agreed that it is a burden to design a five minute (125 character) examination using 43 different characters

The *Fact Sheet* also provides for volunteer examiners obtaining the needed Novice test materials from outside suppliers. Both the VE and the supplier are responsible for determining that the telegraphy and/or written examination is properly prepared. The *W5YI-VEC Program* has properly constructed Novice Element 2 examinations - many versions - available to General and higher class VE's at no cost. (Send an SASE to: W5YI-VEC, P.O. Box #565101; Dallas, Texas 75356)

AMATEUR RADIO CALL SIGNS

...issued as of the first of November 1988.

Radio District	Gp."A" Extra	Gp."B" Advan.	Gp."C" Tech/Gen	Gp."D" Novice
0	WOOG	KE0YU	N0JWH	KB0DIZ
1	NU1A	KC1MC	N1GBL	KA1SQJ
2	WK2Q	KE2JT	N2IRI	KB2GMI
3	NS3M	KD3KB	N3GPQ	KA3TSA
4 (*)	AB4LE	KM4JI	N4UEP	KC4HFS
5 (*)	AA5IM	KG5OT	N5NJO	KB5HON
6 (*)	AA6LG	KJ6OB	N6TOU	KC6AKH
7	WU7F	KF7PB	N7LVL	KB7FZE
8	WM8D	KE8UU	N8KBA	KB8FPP
9	WE9C	KE9NQ	N9HXL	KB9BQB
N. Mariana Is.	AH0G	AH0AE	KH0AL	WH0AAH
Guam	KH2K	AH2CC	KH2DM	WH2ALT
Johnston Is.	AH3B	AH3AC	KH3AB	WH3AAC
Midway Island		AH4AA	KH4AD	WH4AAF
Palmyra/Jarvis	AH5A			
Hawaii	(**)	AH6G	NH6RS	WH6CAK
Kure Island			KH7AA	
Amer. Samoa	AH8C	AH8AD	KH8AG	WH8AAX
Wake Wilkes Peale	AH9A	AH9AD	KH9AD	WH9AAH
Alaska	(**)	AL7KL	NL7PB	WL7BSK
Virgin Islands	NP2E	KP2BN	NP2CR	WP2AGE
Puerto Rico	(**)	KP4PU	WP4RX	WP4IFK

NOTE: * = All 2-by-1 format call signs have been assigned in the 4th, 5th and 6th radio districts. 2-by-2 format call signs from the AA-AL prefix block now being assigned to Extra Class amateurs. ** = All Group "A" (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" run out.

[Source: FCC, Gettysburg, Pennsylvania]

[Uniden, Continued from page 4]

The following day, I received a Federal Express letter (from only five miles away) from Davis advising: "The following initiatives now are underway in this matter:

- (1.) Uniden-Japan's Engineering Department is working on a software redesign. We expect this should be completed within the next ninety days.
- (2.) New 10-meter literature has been prepared. [A copy of which was attached.]
- (3.) We are seeking to emphasize the marketing of the HR2510 in a manner this is compatible with your interests. I have just sent a letter to all of our two-step distributors." [It was attached.]

"Additionally, Uniden has embarked upon an extensive marketing program to try and get the 2510 Model sold at a majority of amateur radio outlets in the United States. This is being implemented by a mass mailing of literature to amateur dealers in the month of November. Further, we are discouraging distributors from selling the product at CB locations and are asking them to be more aggressive in the amateur radio market."

"Uniden is proud of its reputation as a manufacturer of high quality products and has always sought to maintain the highest standards of integrity in the distribution chain of its products. If a problem continues with any of our distributors, we want to know about it." Signed: Paul E. Davis, Executive Vice President

We also received a telephone call from Uniden's **Don Lane/N5NBU** who asked us for a list of amateur dealers ...which we supplied. We met personally with Don and he did agree there was a problem - even showed us some letters requesting illegal modifications - including one from a licensed amateur! Don said that he would be representing Uniden at this weekend's Houston hamfest.

Uniden sincerely wants to do something about the illegal use of its 10-meter radio and accompanying bad publicity. ...and wishes to enter the legitimate amateur market. The major problem is that their distributors primarily sell other than ham radio dealers. Paul Davis was extremely candid with me - even to the point of saying that the Cobra CB people had approached Uniden about making them a 10-meter amateur transceiver, too. Write Davis if you have information about other than ethical distribution of its products. (Uniden Corp of America, 4700 Amon Carter Blvd., Fort Worth, TX 76155.)

entry level Novice course. Cost: \$19.95 plus \$2.00 shipping and handling. Order shipped the same day and order is received. W5YI, P.O. Box #565101; Dallas, Texas 75356-5101

(one manual covers both 3A and 3B): Advanced (4A) or Extra Class (4B). Cost: \$4.95 each plus \$1.50 shipping/handling. W5YI report; P.O. Box #565101; Dallas, TX 75356-5101

AMSAT 1988 SPACE SYMPOSIUM

AMSAT's *Sixth Annual Space Symposium* held in Atlanta, November 11-13, proved the next 2-3 years will be the most exciting ever for satellite hamming. Increased international cooperation, new technologies, and more launch opportunities will advance amateur space communications to a level only dreamed about a few years ago. Among the projects:

Tiny MICROSATs -- the first to be launched by mid-1989 -- to provide store-and-forward packet communications from low earth orbit. Using basic MICROSAT technology, AMSAT-NA, AMSAT-LU, Italian and Brazil AMSAT groups are sponsoring so-called PACSATs, each with slightly different configurations.

Weber State College will build a **N(orthern) U(tah) SAT**, which will add a color TV camera and several scientific instruments to the 10 kg payload. One of the keys to MICROSAT success has been electronics micro-miniaturization: the main computer is essentially an IBM-PC XT clone with 10 MB RAM-disk, which fits into a module 7"x7"x2.5". Each 0.75-cubic-foot satellite contains over half-a-billion transistors!

A new **Japanese HAMSAT** similar to Fuji-OSCAR 12 but with improved power and antenna subsystems.

Amateur operation from the proposed US Space Station, which will probably support all modes, including ATV.

Digital signal processing (DSP) hardware and software for much better weak signal work, demodulation, and even EME (moonbounce) work with small antennas and 100 watts effective radiated power.

Another highlight of the Space Symposium came when special guest **Leonid Labutin/UA3CR** made a brief contact with U1MIR, the amateur station aboard the orbiting Soviet MIR space station. Under the auspices of **Byron Lindsey/W4BIW**, Labutin exchanged signal reports with the cosmonauts on two-meter FM at about 1440 UTC on the 12th. The ground station equipment included a hand-held transceiver and a low-gain dipole antenna. Regular ham operations from MIR will commence within the next several weeks.

• Once again the Miami-based Spanish language **Sociedad Internacional de Radio Aficionados (SIRA)** achieved outstanding communications public service when **Hurricane Joan** slammed the Atlantic coast of Nicaragua with 125 mile-per-hour winds bringing with it mudslides, flash floods and huge tidal waves. SIRA activated its WB4ESB NCS on October 17 at 8:30 a.m. on 14.153 MHz and remained on the air 24 hours a day through October 24 at 10:30 p.m. Several countries participated during the eight day drama. **Joan** left more than 150 dead and hundreds of thousands homeless as it crossed the Caribbean. Its winds and rains caused death and destruction in Venezuela, Columbia, Costa Rica, Nicaragua and El Salvador. Total losses are not evaluated, but it could reach billions! Atlantic **Hurricane Joan** was renamed **Miriam** as she entered the Pacific.

• The FCC announced on October 31 that effective January 1, 1989, the **maximum allowable reimbursement fee** for an amateur operator license examination above the Novice class will be \$4.75. This amount is based upon a 4.2% increase in the Department of Labor Consumer Price Index between October 1, 1987 and September 30, 1988.

• Describing the Commission's reasoning as "perfunctory" and "inconsistent with the record of facts", the Secretary of Defense on October 17 asked the FCC to **reconsider its 220-222 MHz reallocation** in General Docket 87-14. The Secretary of Defense, **Frank Carlucci**, is Executive Agent for the **National Communications System (NCS)**. The *Petition for Reconsideration* was written by McKenzie Whitaker, trial attorney, and Carl Wayne Smith, assistant regulatory counsel in the Office of the Chief Regulatory Counsel-Telecommunication, Defense Communications Agency.

The Pentagon commented: "Prior to filing its comments with the Commission in this proceeding, the NCS conducted very intense deliberations regarding the impact of the Commission's proposed allocation of the 220-222 MHz band to the land mobile service would have on amateur radio's role as an NSEP [National Security Emergency Preparedness] telecommunications resource. It was only after very careful analysis of the Commission's proposals that the decision was made for the NCS to participate as a party in this proceeding. The NCS analysis concluded that the overall public interest would be served best **by not requiring the amateurs to vacate the 220-222 MHz bandwidth.**"

1 Each 10 or more (Qty.)
\$2.00 \$1.00 postpaid
\$2.00 \$1.00 postpaid

TEST MANUAL

Ice - 100
Technician - Element 3(A)

AMATEUR RADIO QUESTION POOLS
Contain all...
Order From:

NEW!!

SCHOOL SCIENCE STATIONS PROPOSED

Texas amateur, **Gerald M. "Gus" Howard, W5KM** of Dallas has filed a *Petition for Rule Making* with the Commission seeking an "Amendment of §Part 97 of the Commission's Rules to modify the Basis and Purpose of the Amateur Service to include; **Using the Amateur Service to interest students in secondary school curricula and especially in science and mathematics.**" Howard is 84 years old. Howard, an ex-FCC enforcement officer, headed up the Dallas field office at the time of his retirement after 32 years of government service. Gus, a lawyer and engineer, started his amateur career in "wireless as a boy with a spark coil" in 1916 at the age of 12. He is a Senior member of the IEEE and *Radio Club of America*.

Although the petition refers to PR Docket No. 88-139, *Reorganization and Deregulation of §Part 97 of the Rules governing the Amateur Radio Services*, it was not filed as a commentary on the rewrite. Howard asks that the Commission consider his request as a separate proceeding.

A 1983 U.S. Government report entitled "A Nation at Risk" says that America's standing as a top economic power is in question. National publications say that our schools are to blame for our inability to compete. Whereas, in the past, we have been world leaders in the manufacture of quality products.

The petition proposes the creation of **Science Club radio stations** at secondary schools and at Boy Scout headquarters to interest our young people in their school curricula, especially in science and mathematics. "Thus the Amateur Service will be officially recognized for its past contributions to our educational system; a contribution concomitant with the existence of the service. Education is inherent in Amateur Radio." Howard argues that *Science Club Amateur Radio Stations* will also increase the Amateur's public service activity.

In support of his petition, Howard attached four exhibits.

Exhibit No. 1: reports that Japan, the U.S.S.R., West Germany and France lead the United States in teaching mathematics and science in elementary and secondary schools. "The Japanese know how to inspire curiosity in kids about the way things work," it reads.

Exhibit No. 2: from *U.S. News & World Report*, editorializes on the lop-sided U.S. educational

system. "Japan trains 1,000 engineers for every 100 lawyers. We train 1,000 lawyers for every 100 engineers. In Japan today, the average eighth grader knows more mathematics than a U.S. business school graduate. A Japanese high school graduate has as much classroom time as an American college graduate." Back in the 50's, America monopolized high tech and made over 80 percent of the world's autos and TVs. "Now in 1988, we make less than 30%..."

Exhibit No. 3: from IEEE's *Spectrum* reports "The quality of secondary school education is a cause of concern outside academia - more specifically, to ...business...."

Exhibit No. 4: an article by **Carole Perry/WB2MGP** taken from the *QCWA Journal*, tells how Amateur Radio stimulates and holds the interest of youngsters. Perry, a Staten Island, New York, teacher and 1987 "Ham of the Year" has packaged her ham radio assisted educational program and makes it available to teachers everywhere.

The extremely well done petition proposes

(1.) ...the creation of science club stations located on school property or on property under the control of scouting authorities. The trustees need not be licensed amateurs ...they are custodians of the station license; the same as is provided in the present rules for military recreational stations.

(2.) ...the creation of a special class of operator license requiring rules, amateur procedures/practices and science station operation. The science club station is not authorized to transmit code unless the operator has his *Certificate of Operating Competence (COOC)* endorsed for code work. If the COOC is not endorsed for code, the operator is restricted to operating frequencies above 30 MHz.

(3.) ...the examination to be administered by a VE who is FCC licensed and familiar with the details of operating a school/scout science station.

(4.) ...to amend §Part 97.1 and §97.1(a) to read: "The Amateur Service is a radio communication service for the purpose of self-training, intercommunication and technical investigations **carried out by students** and amateurs, that is, by duly authorized persons **interested in public education** and in radio technique solely with a personal aim and without pecuniary interest. §Part 97.1(a) Recognition and enhancement of the value of the Amateur Radio Service to the public as a voluntary, noncommercial communications service that: **inherently stimulates individuals toward education, seeking knowledge, especially in science and engineering.** [Petition filed: November 2, 1988]

GMRS REORIENTED TO PERSONAL USE

After years of delay, the FCC has modified the rules governing the **General Radio Mobile Service (GMRS)** to enhance personal use. The new rules prohibit licensing by businesses or organizations in GMRS, and deregulate transient operations or repeaters, among other changes. The matter was presented to the Commissioners on Thursday, October 13, by Senior Personal Radio Branch Staff Attorney, **John Borkowski**. The FCC unanimously adopted the new proposed rules.

The §Part 95 GMRS operates at 460 MHz and was formerly known as Class A Citizens Radio. It predates Citizen's "Band" (27 MHz) by some 10 years. Two 200-KHz segments are allotted to GMRS in the 462 and 467 MHz frequency bands. Anyone 18 and over can obtain a GMRS license and use the service for personal and business communications. Family members can be station operators. Many amateurs use GMRS to provide mobile communications with spouses who are not interested in becoming hams. GMRS spectrum may not be used for packet or data transmissions.

RF engineer **Al Gross**, and ham operator **W8PAL** was the driving force behind Class A in the early postwar years. He produced the first miniaturized handi transceivers for the service. Other manufacturers followed, but GMRS never really got off the ground until the 1970's when used commercial land-mobile equipment became widely available. An explosion of licensing and repeater operations led to today's network of personal-use systems across the country. Many GMRS systems are used by volunteer public service radio teams who assist in disasters, sometimes alongside ARES (*Amateur Radio Emergency Service*) operators.

A special FCC advisory committee studied GMRS in the mid-1970s. That group identified GMRS' biggest problem to be the on-air conflicts between personal users and large commercial dispatch operations that selected GMRS instead of the many business radio services. It recommended that the FCC act immediately to prohibit new commercial user licensing in the GMRS.

The FCC did nothing about these requests until 1987 when, in response to petitions, it proposed to limit licensing of new GMRS stations to individual persons. The agency has finally adopted this position in new rules which take effect January

1, 1989. Existing commercial/organizational licensees will be grandfathered, but will be unable to renew their licenses if they make substantial modifications to their stations (such as add or change channels.)

The following rather interesting quote appears in the FCC's *Order*. Some commenters said that "GMRS personal communications are only for people unwilling to join an amateur radio club," a statement negated by the fact that many GMRS licensees are hams. The FCC said, "The amateur service is unsuitable for typical GMRS personal communications that involve business matters, such as discussions of purchases. It would be unreasonable and illogical to require all members of a family to pass amateur operator license examinations in order to conduct only a portion of the intercommunications they now conduct in the GMRS."

The new rules are a breath of fresh air for many GMRS personal users. "The FCC has recognized that CB is inadequate to meet the personal communications needs of the American public," according to Chicago attorney Randall Knowles. "They have been unable to settle upon what they would use as a solution. At long last, after 15 years, the Commission has finally decided what it is going to do about the problem. It's long overdue, but it's certainly very welcome," he said. Knowles is communications coordinator for the Personal Radio Steering Group Inc. (PRSG), the national GMRS clearinghouse.

The new rules also liberalize transient (roamer) operation by traveling GMRS repeater users. GMRS licensees will now be permitted two primary channels or channel pairs, with a third channel pair for emergencies and traveler assistance. The FCC granted seven new interstitial frequencies at 462 MHz (but not at 467 MHz) to GMRS personal users for simplex operation in addition to the current eight primary channels, and will allow various other spectrum-efficient types of operations. Some kinds of interference-causing (but currently legal) operations will be phased out.

To license in GMRS, use FCC Form 574. The FCC charges \$30 to process the form. Complete licensing and repeater guides, as well as copies of the new rules with explanations, are available from: PRSG at PO Box 2851, Ann Arbor, MI 48106. [FCC action on PR Docket No. 87-265 by Report and Order, dated October 13, 1988.]